derstanding of the ground water resource problem; and they should be based on adequate legal authority. The program should have objective mechanisms for periodic evaluation of the program's success and a process for achieving needed modifications.

2. Information

A successful program must be founded on an information base that allows proper definition of the resource and the problems, and evaluation of prevention strategies. Many decisions must be made with limited data and scientific uncertainty. However, a prevention program should be based on adequate surveys of (a) water resources and their location, (b) ground water basin characteristics with respect to the potential for contamination, and (c) current and anticipated land and surface water uses that can affect ground water. Information on water resource conditions and new ground water research must be easily available to decision makers.

3. Technical Basis

Effective ground water protection programs require a sound technical basis. Programs should be based on (a) appropriate physical, social, and behavioral assumptions; (b) physical, chemical, engineering, and hydro-logic principles; and (c) sound relationships linking mandated actions with desired results. For instance, programs should account for the interconnection of atmosphere, land, and surface water and ground water resources.

4. Source Elimination and Control

In the long term, ground water protection programs should eliminate or reduce the sources of ground water contamination. Simply transferring the problem to another medium such as the air or surface water must be avoided. Sources can be reduced or eliminated by (a) prohibition of certain harmful activities or products; (b) the rational siting of activities and facilities that threaten ground water away from sensitive areas (by land use controls, permits, or regulations); (c) incentives for use of products and technologies less threatening to ground water quality; and (d) incentives for recycling and reuse of waste products.

5. Intergovernmental and Interagency Linkages

Ground water protection programs must link local, state, and federal activities into coherent, coordinated action to be effective. Ground water is